

# DRAFT

## MEPA/NEPA/HB495 GENERIC CHECKLIST

### PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action Partial Funding of Stream Channel Restoration
2. Agency Authority for the Proposed Action Montana Fish, Wildlife & Parks and Flathead Conservation District
3. Name of Project Monk Channel Restoration
4. Name, Address and Phone Number of Project Sponsor (if other than the agency)  
  
Flathead Conservation District, 30 Lower Valley Rd., Kalispell, MT 59901,  
(406) 752-4220
5. If Applicable:  
  
Estimated Construction/Commencement Date October 1997  
Estimated Completion Date November 1997  
Current Status of Project Design (% complete) 100% conceptual design
6. Location Affected by Proposed Action (county, range and township)  
  
Flathead County - T26N, R27W, Section 3
7. Project Size: Estimate the number of acres that would be directly affected that are currently:

(a) Developed: residential . . . <u>0</u> acres industrial . . . . <u>0</u> acres	(d) Floodplain . . . . . <u>5</u> acres
(b) Open Space/Woodlands/ Recreation . . . <u>0</u> acres	(e) Productive: irrigated cropland . . . <u>0</u> acres dry cropland . . . . . <u>1</u> acres forestry . . . . . <u>0</u> acres rangeland . . . . . <u>0</u> acres other . . . . . <u>0</u> acres
(c) Wetlands/Riparian Areas . . . . . <u>5</u> acres	

8. Map/site plan: attach an original 8 ½" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

Map attached. Copy of private consultant's report of recommendations is also included.

9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.

To repair and stabilize streambank directing streamflow into historic natural channel and out of a man-made bypass channel. Proposed action would reduce bank erosion, sedimentation, and possible future headcutting.

10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

<u>Agency Name</u>	<u>Permit</u>	<u>Date Filed/#</u>
MFWP	124	9/97
USACOE	404	9/97

(b) Funding:

<u>Agency Name</u>	<u>Funding Amount</u>
MFWP	\$3,000
FCD	\$3,000
Flathead Wildlife, Inc.	\$1,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
None	

11. List of Agencies Consulted During Preparation of the EA:

Watershed Consulting, LLP (Igor Suchomel, Private Consultant)



## PART II. ENVIRONMENTAL REVIEW

A. Evaluation of the Impacts of the Proposed Action Including Secondary and Cumulative Impacts on the Physical and Human Environment:

### PHYSICAL ENVIRONMENT

1. LAND RESOURCES Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Other: _		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

A. Proposed action will return flow to historic channel improving stream function and reducing bank erosion and sedimentation.

### PHYSICAL ENVIRONMENT

2. AIR Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Emission of air pollutants or deterioration of ambient air quality?		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture or temperature patterns, or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. Other: _		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):

**PHYSICAL ENVIRONMENT** (continued)

3. <u>WATER</u> Will the proposed action result in:	IMPACTS				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, turbidity or pathogens?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in the risk of contamination of surface or groundwater?		X				
i. Violation of the Montana Non Degradation Statute?		X				
j. Effects on any existing water right or reservation?		X				
k. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
l. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
m. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (Attach additional pages of narrative if needed):



**PHYSICAL ENVIRONMENT** (continued)

4. <u>VEGETATION</u>  Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated *	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered plant species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation Resources (Attach additional pages of narrative if needed):

**PHYSICAL ENVIRONMENT**

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. Other: __		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT**

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other: __		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):



## HUMAN ENVIRONMENT

7. <u>LAND USE</u>	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
Will the proposed action result in:						
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				
e. Other: ____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

## HUMAN ENVIRONMENT

8. <u>RISK/HEALTH HAZARDS</u>	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
Will the proposed action result in:						
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. Other: ____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

## HUMAN ENVIRONMENT

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				
f. Other: ____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

## HUMAN ENVIRONMENT

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Have an effect upon the local or state tax base and revenues?		X				
c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Result in increased used of any energy source?		X				
e. Other: ____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):



**HUMAN ENVIRONMENT**

11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT*				Can Impact Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report)		X				
d. Other: __		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (Attach additional pages of narrative if needed):

**HUMAN ENVIRONMENT (continued)**

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT				Can Impacts Be Mitigated*	Comment Index
	Unknown*	None	Minor*	Potentially Significant*		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural or historic values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. Other: __		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):

## SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE  Will the proposed action, considered as a whole:	IMPACT				Can Impacts Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant *		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. Other: _____		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (Attach additional pages of narrative if needed):



## **PART II. ENVIRONMENTAL REVIEW** (Continued)

Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

No Action Alternative: The man-made channel and flood flows have contributed to significant erosion of bank and sediment deposition to the streambed. By not repairing and restoring natural streambank and course, erosion will continue.

3. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

The proposed action will be reviewed through the 124 and 404 permitting process.

4. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No EIS required. EA is appropriate due to relatively small size and cost of project and no significant negative impacts are associated with the activity.

5. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

The entire project is contained on one landowner's property. The project has been reviewed by MFWP, FCD, and private individuals. The most limited public review is required.

6. Duration of comment period if any:

N/A

7. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

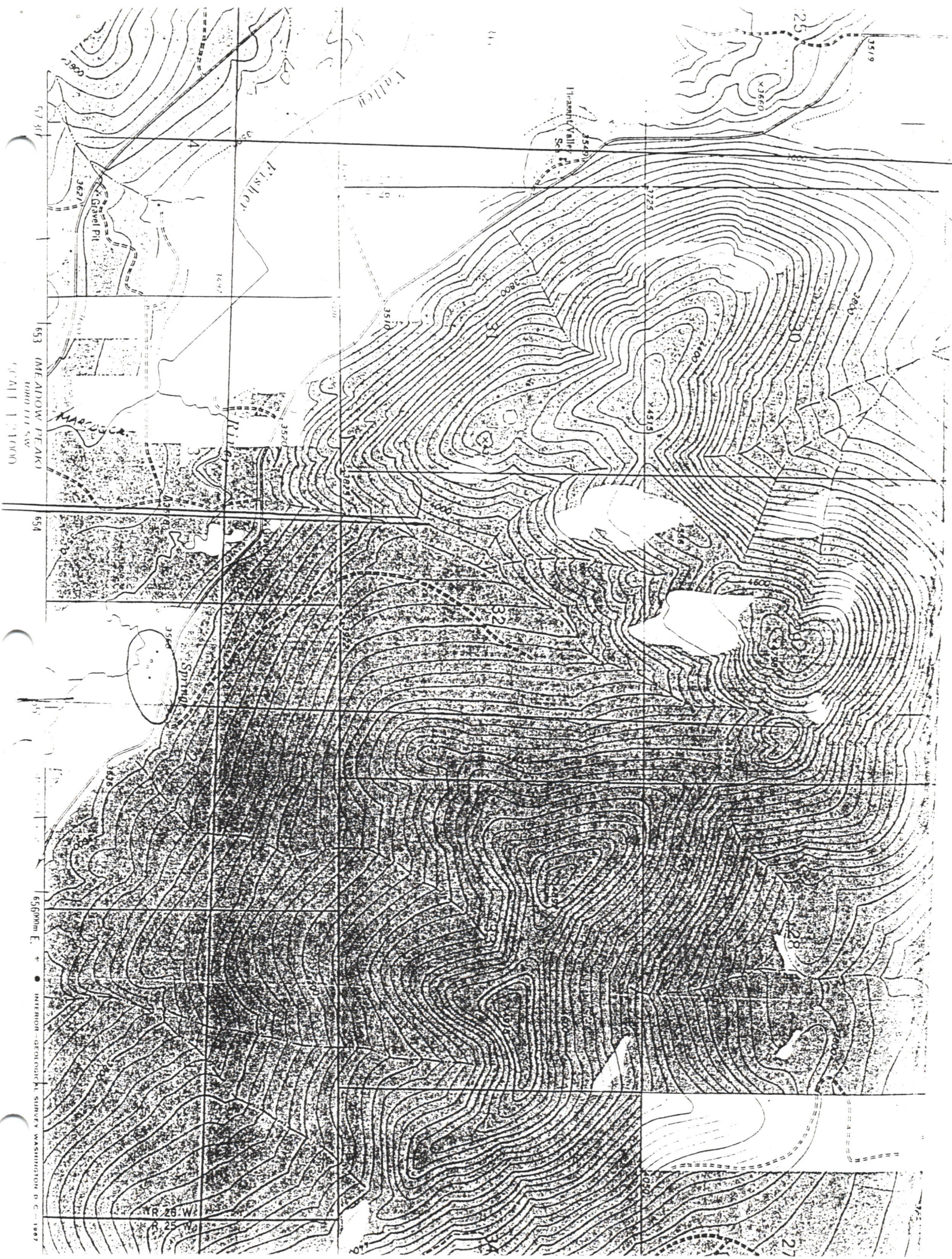
Mark Deleray, Fisheries Biologist  
Montana Fish, Wildlife & Parks  
490 N. Meridian Rd.  
Kalispell, MT 59901  
(406) 751-4543

### **PART III. NARRATIVE EVALUATION AND COMMENT**

The proposed action will improve stream conditions and function. Without action, the negative impacts to water and habitat quality will continue.

### **PART IV. EA CONCLUSION SECTION**









## WATERSHED CONSULTING, LLP

643 Fulkerson Lane, Polson, Montana 59860  
Fax: (406) 883-6610

\* (406) 883-2899; 4811  
E-mail: WatershedC@aol.com

I. Suchomel, M.A., Hydrologist/Vodnik  
S. Buckley, M.S., Geologist/Geomorphologist  
Jim Rokosch, B.S., Aquatic Biologist

December 3, 1996

Mark Deleray  
MT Fish, Wildlife & Parks  
490 N. Meridian Road  
Kalispell, MT 59901

Re: Fisher River - Austin Monk's place

Dear Mark,

Here is a conceptual evaluation and proposal to alleviate erosion at Fisher River on Mr. Monk's place. Due to the amount of snow on the ground, I would like to visit the site once more during spring to ascertain details of the proposed rehabilitation.

### Evaluation:

The Fisher River at the site is a highly meandering E type meadow stream; estimates of bankfull width, depth and entrenchment could not be made because of snow and ice.

Mr. Monk has apparently cut-off several meanders, thus increasing local slope and a very serious danger of streambed downcutting and headcutting. So far, majority of observable erosion has occurred on a high terrace? lobe, composed of silt and fine sand, through which the straightened channel runs. Last year's extreme floods definitively contributed to the magnitude of the erosion; regular spring runoff (bankfull flow) would not have reached the highly erodible terrace lobe. The original channel appears in good conditions.

An attempt by Mr. Monk to return the flow to the original channel has failed because of combination of insufficient design and extreme floods of the past runoff.

The most serious long-term problem is the potential for headcut due to the increase of slope in the cut-off channel. Such incision would impact the stream upstream to the next hard grade control. The immediate problem is the erosion and delivery of fine sediment downstream.

### Rehabilitation proposal:

The river should be returned to the original channel, the cut-off channel should be filled,



and the cut-slopes of the lobe re-sloped to 3:1 gradient.

Where the cut-off channel takes off the original one, the meander needs to be reshaped to larger curvature radius, and buried, rock-weighted rootwad revetments used to stabilize the outside bank. About six large rootwads with 8-foot plus long stems should suffice. About 15 feet upstream of the channel split, the fill in the cut-off channel needs to be faced with rocks extending into the banks to prevent potential headcut in a case of another extreme flood.

Material for the cut-off channel fill can come from the re-sloping of the terrace lobe. The channel fill needs to reach the average relief of the meadow bottom. Tree stems should be half-buried into the fill to increase roughness and flow resistance. The whole site then needs to be re-seeded with appropriate grass mix.

Time and expense estimates:

- |   |   |         |
|---|---|---------|
| a) A visit and detailed plan preparation:     | 2 days @ \$450/day + expenses                 | \$1,000 |
| b) Work supervision:                          | 2 days @ \$450/day + expenses                 | \$1,000 |
| c) Construction:                              | 1 day backhoe, 2 days cat or front-end loader |         |
| d) Rootwad + rock (30 3-foot rocks) delivery: | 1 day ?                                       |         |

An untrained local operator, perhaps Mr. Monk himself, should be able to do the work with a supervision. It may be possible to save a day on items a) and b). The delivery of rootwads and rock can be best addressed by the landowner and the Conservation District, since they are familiar with local sources; we would be glad to help with this step if needed. The work should be finished before next runoff.

If you have any questions, please give us a call.

Sincerely,



Igor Suchomei